

**TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A FILING UNDER 35 U.S.C. 371**

ATTORNEY'S DOCKET NUMBER

**TCP-008**

U.S. APPLICATION NO. (if known, see 37 CFR 1.5)

**10/575270**

INTERNATIONAL APPLICATION NO.

**PCT/JP2005/004593**

INTERNATIONAL FILING DATE

**March 9, 2005**

PRIORITY DATE CLAIMED

**March 12, 2004**

TITLE OF INVENTION

**VISIBLE LIGHT RESPONSIVE COMPLEX OXIDE PHOTOCATALYST AND METHOD OF  
USING THE SAME TO DECOMPOSE AND ELIMINATE HARMFUL CHEMICAL  
SUBSTANCE**

APPLICANT(S) FOR DO/EO/US

**Jinhua YE; Junwang TANG**

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) as indicated below.
4. ☐ The US has been elected (Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
  - a. ☐ is transmitted hereto (required only if not communicated by the International Bureau).
  - b. ☒ has been communicated by the International Bureau.
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US)
6. ☒ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
  - a. ☒ is attached hereto.
  - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
  - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ have been communicated by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendment has NOT expired.
  - d. ☐ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☐ An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11 to 20 below concern document(s) or information included:

11. ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. ☒ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☐ A preliminary amendment.
14. ☒ An Application Data Sheet under CFR 1.76
15. ☐ A substitute specification.
16. ☐ A power of attorney and/or change of address letter.
17. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821-1.825
18. ☐ A second copy of the published international application under 35 U.S.C. 154(d)(4)
19. ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4)
20. ☒ Other items or information: **PCT/IB/308; Front cover of WO 2005/087371 A1; PCT/ISA/210**

11 APR 2006

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|---|--|---|--|--|--|
| U.S. APPLICATION NO. (if known, see 37 CFR 1.5)<br><div style="font-size: 1.5em; font-weight: bold; margin-top: 5px;">10/575210</div> |  | INTERNATIONAL APPLICATION NO.<br><b>PCT/JP2005/004593</b> |  | ATTORNEY'S DOCKET NUMBER<br><b>TCP-008</b> |  |
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|   |               |  |            |                                       |          |
|---|---------------|--|------------|---------------------------------------|----------|
| The following fees are submitted:   |               |  |            | <b>CALCULATIONS      PTO USE ONLY</b> |          |
| 21. <input checked="" type="checkbox"/> Basic national fee  |               | ... \$ 300.00  |            | \$ 300.00                             |          |
| 22. <input checked="" type="checkbox"/> Examination fee   |               |  |            |                                       |          |
| If International preliminary examination report prepared by USPTO and all claims satisfy provisions of PCT Article 33(1)-(4)  |               |  |            | \$ 200.00                             |          |
| All other situations  |               |  |            |                                       |          |
| 23. <input checked="" type="checkbox"/> Search fee  |               |  |            |                                       |          |
| Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Search Authority  |               |  |            | \$ 500.00                             |          |
| International Search Report prepared and provided to the Office   |               |  |            |                                       |          |
| All other situations  |               |  |            |                                       |          |
| <b>TOTAL OF 21, 22 and 23 =</b>   |               |  |            | <b>\$1,000.00</b>                     |          |
| <input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof |               |  |            |                                       |          |
| Total Sheets  | Extra sheets  | Number of each additional 50 or fraction thereof<br>(round up to a whole number) | RATE       |                                       |          |
| - 100 =   | /50 =         |  | × \$250.00 | \$                                    |          |
| Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).  |               |  |            | \$                                    |          |
| CLAIMS  | NUMBER FILED  | NUMBER EXTRA   | RATE       |                                       |          |
| Total Claims  | 3      - 20 = |  | × \$ 50.00 | \$                                    | .00      |
| Independent Claims  | 2      - 3 =  |  | × \$200.00 | \$                                    | .00      |
| MULTIPLE DEPENDENT CLAIM(S) (if applicable)   |               |  | + \$360.00 | \$                                    |          |
| <b>TOTAL OF ABOVE CALCULATIONS =</b>  |               |  |            | <b>\$ 1,000.00</b>                    |          |
| <input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by ½.  |               |  |            | \$ 0.00                               |          |
| <b>SUBTOTAL =</b>   |               |  |            | <b>\$ 1,000.00</b>                    |          |
| Processing fee of \$130.00 for furnishing the English translation later than the 30 months from the earliest claimed priority date (37 CFR 1.492(f)).   |               |  |            | +                                     | \$ 0.00  |
| <b>TOTAL NATIONAL FEE =</b>   |               |  |            | <b>\$ 1,000.00</b>                    |          |
| Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property  |               |  |            | +                                     | \$ 40.00 |
| <b>TOTAL FEES ENCLOSED =</b>  |               |  |            | <b>\$ 1,040.00</b>                    |          |
|   |               |  |            | Amount to be refunded:                |          |
|   |               |  |            | Amount to be charged                  |          |

  

a. ☐ A check in the amount of \$ \_\_\_\_\_ .00 to cover the above fees is enclosed.

b. ☐ Please charge my Deposit Account No. 11-0219 in the amount of \$ \_\_\_\_\_ to cover the above fees. A duplicate copy of this sheet is enclosed.

c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 11-0219. A duplicate copy of this sheet is enclosed.

c. ☒ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

**NOTE:** Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

  

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| SEND ALL CORRESPONDENCE TO:<br><b>HAUPTMAN KANESAKA BERNER</b><br><b>Patent Agents, LLP</b><br>1700 Diagonal Road, Suite 310<br>Alexandria, VA 22314<br>(703) 519-9785 | Customer No.<br><div style="font-size: 1.2em; font-weight: bold;">32628</div> PATENT TRADEMARK OFFICE |
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| <div style="font-family: cursive; font-size: 1.2em; margin-bottom: 5px;">Manabu Kanesaka</div> SIGNATURE<br><div style="font-weight: bold; margin-bottom: 5px;">Manabu Kanesaka</div> NAME<br><div style="font-weight: bold; margin-bottom: 5px;">31,467</div> REGISTRATION NUMBER |  |
|--|--|